

AMENDED IN SENATE APRIL 2, 2009

SENATE BILL

No. 542

Introduced by Senators Wiggins and Strickland

February 27, 2009

An act to ~~add Section 2853 to~~ *amend Section 25782 of the Public Resources Code, and to amend Section 2851 of, and to add Section 2853 to, the Public Utilities Code, relating to energy.*

LEGISLATIVE COUNSEL'S DIGEST

SB 542, as amended, Wiggins. Solar energy and energy efficiency programs.

Under existing law, the Public Utilities Commission (PUC) has regulatory authority over public utilities, including electrical corporations, as defined. A decision of the PUC adopted the California Solar Initiative. Existing law requires the PUC to undertake certain steps in implementing the California Solar Initiative. Existing law establishes a surcharge on all natural gas consumed in the state and upon electricity distributed by the state's three largest electrical corporations, to fund certain low-income assistance programs, cost-effective energy efficiency and conservation activities, and public interest research and development.

This bill would require the PUC, by July 1, 2010, to develop and implement a strategy to expand the participation of multiunit residential and commercial rental properties in utility energy efficiency and solar energy programs and to prepare and submit a report on the program to the Legislature by that date. The bill would require the PUC to ensure that the strategy implemented does not result in any additional ratepayer surcharges, is funded through existing programs, and is cost effective for utility customers. The bill would require the PUC to consider, in

developing the strategy, whether synergies exist between its energy efficiency programs and the solar energy programs of the California Solar Initiative, that, in the determination of the PUC, can make energy efficiency and solar investments cost effective for utility customers in multiunit commercial and residential rental properties. *The bill would require the PUC, in implementing the California Solar Initiative, to ensure that solar energy system installers are informed that if the solar energy system is to be installed on a manufactured home, that the installation is required to comply with certain statutory and regulatory requirements pertaining to the alteration of manufactured housing.*

Existing law requires the State Energy Resources Conservation and Development Commission (Energy Commission), in consultation with the PUC, local publicly owned electric utilities, and interested members of the public, to establish and thereafter revise eligibility criteria for solar energy systems and to establish conditions for ratepayer funded incentives that are applicable to the California Solar Initiative.

This bill would require the Energy Commission to additionally establish as a condition for ratepayer funded incentives, that if the solar energy system is to be installed on manufactured housing, that it comply with certain statutory and regulatory requirements pertaining to the alteration of manufactured housing.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

1 SECTION 1. Section 25782 of the Public Resources Code is
2 amended to read:

3 25782. (a) The commission shall, by January 1, 2008, in
4 consultation with the Public Utilities Commission, local publicly
5 owned electric utilities, and interested members of the public,
6 establish eligibility criteria for solar energy systems receiving
7 ratepayer funded incentives that include all of the following:

8 (1) Design, installation, and electrical output standards or
9 incentives.

10 (2) The solar energy system is intended primarily to offset part
11 or all of the consumer's own electricity demand.

12 (3) All components in the solar energy system are new and
13 unused, and have not previously been placed in service in any
14 other location or for any other application.

1 (4) The solar energy system has a warranty of not less than 10
2 years to protect against defects and undue degradation of electrical
3 generation output.

4 (5) The solar energy system is located on the same premises of
5 the end-use consumer where the consumer's own electricity
6 demand is located.

7 (6) The solar energy system is connected to the electrical
8 corporation's electrical distribution system within the state.

9 (7) The solar energy system has meters or other devices in place
10 to monitor and measure the system's performance and the quantity
11 of electricity generated by the system.

12 (8) The solar energy system is installed in conformance with
13 the manufacturer's specifications and in compliance with all
14 applicable electrical and building code standards.

15 (b) The commission shall establish conditions on ratepayer
16 funded incentives that require all of the following:

17 (1) Appropriate siting and high quality installation of the solar
18 energy system by developing installation guidelines that maximize
19 the performance of the system and prevent qualified systems from
20 being inefficiently or inappropriately installed. The conditions
21 established by the commission shall not impact housing designs
22 or densities presently authorized by a city, county, or city and
23 county. The goal of this paragraph is to achieve efficient
24 installation of solar energy systems to promote the greatest energy
25 production per ratepayer dollar.

26 (2) Optimal solar energy system performance during periods of
27 peak electricity demand.

28 (3) Appropriate energy efficiency improvements in the new or
29 existing home or commercial structure where the solar energy
30 system is installed.

31 *(c) The commission shall additionally require as a condition*
32 *on ratepayer-funded incentives, that if the solar energy system is*
33 *to be installed on a manufactured home, that the installation*
34 *complies with Section 18029 of the Health and Safety Code and*
35 *Section 4040 of Title 25 of the California Code of Regulations.*

36 ~~(e)~~

37 (d) The commission shall set rating standards for equipment,
38 components, and systems to assure reasonable performance and
39 shall develop standards that provide for compliance with the
40 minimum ratings.

1 ~~(d)~~

2 (e) Upon establishment of eligibility criteria pursuant to
3 subdivision (a), no ratepayer funded incentives shall be made for
4 a solar energy system that does not meet the eligibility criteria.

5 SEC. 2. *Section 2851 of the Public Utilities Code is amended*
6 *to read:*

7 2851. (a) In implementing the California Solar Initiative, the
8 commission shall do all of the following:

9 (1) The commission shall authorize the award of monetary
10 incentives for up to the first megawatt of alternating current
11 generated by solar energy systems that meet the eligibility criteria
12 established by the State Energy Resources Conservation and
13 Development Commission pursuant to Chapter 8.8 (commencing
14 with Section 25780) of Division 15 of the Public Resources Code.
15 The commission shall determine the eligibility of a solar energy
16 system, as defined in Section 25781 of the Public Resources Code,
17 to receive monetary incentives until the time the State Energy
18 Resources Conservation and Development Commission establishes
19 eligibility criteria pursuant to Section 25782. Monetary incentives
20 shall not be awarded for solar energy systems that do not meet the
21 eligibility criteria. The incentive level authorized by the
22 commission shall decline each year following implementation of
23 the California Solar Initiative, at a rate of no less than an average
24 of 7 percent per year, and shall be zero as of December 31, 2016.
25 The commission shall adopt and publish a schedule of declining
26 incentive levels no less than 30 days in advance of the first decline
27 in incentive levels. The commission may develop incentives based
28 upon the output of electricity from the system, provided those
29 incentives are consistent with the declining incentive levels of this
30 paragraph and the incentives apply to only the first megawatt of
31 electricity generated by the system.

32 (2) The commission shall adopt a performance-based incentive
33 program so that by January 1, 2008, 100 percent of incentives for
34 solar energy systems of 100 kilowatts or greater and at least 50
35 percent of incentives for solar energy systems of 30 kilowatts or
36 greater are earned based on the actual electrical output of the solar
37 energy systems. The commission shall encourage, and may require,
38 performance-based incentives for solar energy systems of less than
39 30 kilowatts. Performance-based incentives shall decline at a rate

1 of no less than an average of 7 percent per year. In developing the
2 performance-based incentives, the commission may:

3 (A) Apply performance-based incentives only to customer
4 classes designated by the commission.

5 (B) Design the performance-based incentives so that customers
6 may receive a higher level of incentives than under incentives
7 based on installed electrical capacity.

8 (C) Develop financing options that help offset the installation
9 costs of the solar energy system, provided that this financing is
10 ultimately repaid in full by the consumer or through the application
11 of the performance-based rebates.

12 (3) By January 1, 2008, the commission, in consultation with
13 the State Energy Resources Conservation and Development
14 Commission, shall require reasonable and cost-effective energy
15 efficiency improvements in existing buildings as a condition of
16 providing incentives for eligible solar energy systems, with
17 appropriate exemptions or limitations to accommodate the limited
18 financial resources of low-income residential housing.

19 (4) Notwithstanding subdivision (g) of Section 2827, the
20 commission may develop a time-variant tariff that creates the
21 maximum incentive for ratepayers to install solar energy systems
22 so that the system's peak electricity production coincides with
23 California's peak electricity demands and that assures that
24 ratepayers receive due value for their contribution to the purchase
25 of solar energy systems and customers with solar energy systems
26 continue to have an incentive to use electricity efficiently. In
27 developing the time-variant tariff, the commission may exclude
28 customers participating in the tariff from the rate cap for residential
29 customers for existing baseline quantities or usage by those
30 customers of up to 130 percent of existing baseline quantities, as
31 required by Section 80110 of the Water Code. Nothing in this
32 paragraph authorizes the commission to require time-variant pricing
33 for ratepayers without a solar energy system.

34 (5) *Ensure that solar energy system installers are informed that*
35 *if the solar energy system is to be installed on a manufactured*
36 *home, that the installation is required to comply with Section 18029*
37 *of the Health and Safety Code and Section 4040 of Title 25 of the*
38 *California Code of Regulations.*

39 (b) Notwithstanding subdivision (a), in implementing the
40 California Solar Initiative, the commission may authorize the award

1 of monetary incentives for solar thermal and solar water heating
2 devices, in a total amount up to one hundred million eight hundred
3 thousand dollars (\$100,800,000).

4 (c) (1) In implementing the California Solar Initiative, the
5 commission shall not allocate more than fifty million dollars
6 (\$50,000,000) to research, development, and demonstration that
7 explores solar technologies and other distributed generation
8 technologies that employ or could employ solar energy for
9 generation or storage of electricity or to offset natural gas usage.
10 Any program that allocates additional moneys to research,
11 development, and demonstration shall be developed in
12 collaboration with the Energy Commission to ensure there is no
13 duplication of efforts, and adopted by the commission through a
14 rulemaking or other appropriate public proceeding. Any grant
15 awarded by the commission for research, development, and
16 demonstration shall be approved by the full commission at a public
17 meeting. This subdivision does not prohibit the commission from
18 continuing to allocate moneys to research, development, and
19 demonstration pursuant to the self-generation incentive program
20 for distributed generation resources originally established pursuant
21 to Chapter 329 of the Statutes of 2000, as modified pursuant to
22 Section 379.6.

23 (2) The Legislature finds and declares that a program that
24 provides a stable source of monetary incentives for eligible solar
25 energy systems will encourage private investment sufficient to
26 make solar technologies cost effective.

27 (3) On or before June 30, 2009, and by June 30th of every year
28 thereafter, the commission shall submit to the Legislature an
29 assessment of the success of the California Solar Initiative program.
30 That assessment shall include the number of residential and
31 commercial sites that have installed solar thermal devices for which
32 an award was made pursuant to subdivision (b) and the dollar value
33 of the award, the number of residential and commercial sites that
34 have installed solar energy systems, the electrical generating
35 capacity of the installed solar energy systems, the cost of the
36 program, total electrical system benefits, including the effect on
37 electrical service rates, environmental benefits, how the program
38 affects the operation and reliability of the electrical grid, how the
39 program has affected peak demand for electricity, the progress
40 made toward reaching the goals of the program, whether the

1 program is on schedule to meet the program goals, and
 2 recommendations for improving the program to meet its goals. If
 3 the commission allocates additional moneys to research,
 4 development, and demonstration that explores solar technologies
 5 and other distributed generation technologies pursuant to paragraph
 6 (1), the commission shall include in the assessment submitted to
 7 the Legislature, a description of the program, a summary of each
 8 award made or project funded pursuant to the program, including
 9 the intended purposes to be achieved by the particular award or
 10 project, and the results of each award or project.

11 (d) (1) The commission shall not impose any charge upon the
 12 consumption of natural gas, or upon natural gas ratepayers, to fund
 13 the California Solar Initiative.

14 (2) Notwithstanding any other provision of law, any charge
 15 imposed to fund the program adopted and implemented pursuant
 16 to this section shall be imposed upon all customers not participating
 17 in the California Alternate Rates for Energy (CARE) or family
 18 electric rate assistance (FERA) programs as provided in paragraph
 19 (2), including those residential customers subject to the rate cap
 20 required by Section 80110 of the Water Code for existing baseline
 21 quantities or usage up to 130 percent of existing baseline quantities
 22 of electricity.

23 (3) The costs of the program adopted and implemented pursuant
 24 to this section may not be recovered from customers participating
 25 in the California Alternate Rates for Energy or CARE program
 26 established pursuant to Section 739.1, except to the extent that
 27 program costs are recovered out of the nonbypassable system
 28 benefits charge authorized pursuant to Section 399.8.

29 (e) In implementing the California Solar Initiative, the
 30 commission shall ensure that the total cost over the duration of the
 31 program does not exceed three billion three hundred fifty million
 32 eight hundred thousand dollars (\$3,350,800,000). The financial
 33 components of the California Solar Initiative shall consist of the
 34 following:

35 (1) Programs under the supervision of the commission funded
 36 by charges collected from customers of San Diego Gas and Electric
 37 Company, Southern California Edison Company, and Pacific Gas
 38 and Electric Company. The total cost over the duration of these
 39 programs shall not exceed two billion one hundred sixty-six million
 40 eight hundred thousand dollars (\$2,166,800,000) and includes

1 moneys collected directly into a tracking account for support of
2 the California Solar Initiative and moneys collected into other
3 accounts that are used to further the goals of the California Solar
4 Initiative.

5 (2) Programs adopted, implemented, and financed in the amount
6 of seven hundred eighty-four million dollars (\$784,000,000), by
7 charges collected by local publicly owned electric utilities pursuant
8 to Section 387.5. Nothing in this subdivision shall give the
9 commission power and jurisdiction with respect to a local publicly
10 owned electric utility or its customers.

11 (3) Programs for the installation of solar energy systems on new
12 construction, administered by the State Energy Resources
13 Conservation and Development Commission pursuant to Chapter
14 8.6 (commencing with Section 25740) of Division 15 of the Public
15 Resources Code, and funded by nonbypassable charges in the
16 amount of four hundred million dollars (\$400,000,000), collected
17 from customers of San Diego Gas and Electric Company, Southern
18 California Edison Company, and Pacific Gas and Electric Company
19 pursuant to Article 15 (commencing with Section 399).

20 **SECTION 1.**

21 *SEC. 3.* Section 2853 is added to the Public Utilities Code, to
22 read:

23 2853. (a) The Legislature finds and declares both of the
24 following:

25 (1) Owners of multiunit residential or commercial rental property
26 that are individually metered or master-metered have little financial
27 incentive to implement reasonable and cost-effective energy
28 efficiency improvements and solar energy projects.

29 (2) Forty-three percent of this state's residential housing units
30 are rented, indicating that many housing units and many
31 Californians are unable to benefit from this state's programs to
32 support energy efficiency and the use of solar energy.

33 (b) By July 1, 2010, the commission shall do both of the
34 following:

35 (1) Develop and implement a strategy to expand the participation
36 rates of multiunit residential and commercial rental properties in
37 utility energy efficiency and solar energy programs.

38 (2) Prepare and submit a report to the Legislature on the program
39 developed pursuant to paragraph (1).

1 (c) The commission shall ensure that the strategy developed
2 and implemented pursuant to subdivision (b) does not result in any
3 additional ratepayer surcharges and is funded through existing
4 utility energy efficiency programs and the California Solar
5 Initiative, as defined in subdivision (a) of Section 2852.

6 (d) The commission shall ensure that the strategy developed
7 and implemented pursuant to subdivision (b) is cost effective for
8 utility customers.

9 (e) The commission shall consider, in developing the strategy
10 pursuant to subdivision (b), whether synergies exist between its
11 energy efficiency programs and the solar energy programs of the
12 California Solar Initiative, including the low-income provisions
13 of the California Solar Initiative, that, in the determination of the
14 commission, can make energy efficiency and solar investments
15 cost effective for utility customers in multiunit residential or
16 commercial rental properties.